DRAFT

ENVIRONMENTAL ASSESSMENT

STETSON
SAVING GRACE
ALTERNATIVE LIVESTOCK OPERATION

MAY 2000

Montana Fish, Wildlife & Parks
Region 1
490 North Meridian
Kalispell, Montana 59901

Flathead

TABLE OF CONTENTS

FIGURES

APPENDICES

SUMMARY

DRAFT ENVIRONMENTAL ASSESSMENT
PROPOSED SAVING GRACE ELK RANCH ALTERNATIVE LIVESTOCK OPERATION

INTRODUCTION

Montana Fish, Wildlife & Parks (FWP) is required to perform an environmental analysis in accordance with the Montana Environmental Policy Act (MEPA) for each proposal for projects, programs, legislation, and other major actions of state government significantly affecting the quality of the human environment (Administrative Rules of Montana [ARM] 12.2.430). FWP uses environmental assessments (EAs) in the Alternative Livestock Operation licensing process to identify and evaluate environmental impacts of a proposed Alternative Livestock Operation. EAs also determine whether the impacts would be significant and whether, as a consequence, FWP would perform a more detailed environmental impact statement (EIS).

When preparing an EA, FWP reviews environmental impacts of the Proposed Action, impacts of the No Action Alternative, and impacts of other alternative actions which include recommended and/or mandatory measures to mitigate the project's impacts. A mitigated EA includes alternatives with enforceable requirements (stipulations) which reduce impacts of the Proposed Action below the level of significance. The EA may also recommend a preferred alternative for the FWP decision maker.

This EA is prepared for the proposed construction of the Saving Grace Elk Ranch Alternative Livestock Operation located near Kila, Montana. Based upon its review of the alternative livestock operation license application, FWP has prepared an EA.

OBJECTIVES

This EA has been prepared to serve the following purposes in accordance with FWP MEPA rules (ARM 12.2.430):

- ensure that FWP uses natural and social sciences in planning and decision making;
- to be used in conjunction with other agency planning and decision-making procedures to make a determination regarding the Proposed Action;
- assist in the evaluation of reasonable alternatives and the development of conditions, stipulations, and modifications to the Proposed Action;
- determine the need to prepare an EIS through an initial evaluation and determination of the significance of impacts associated with the Proposed Action;
- ensure fullest appropriate opportunity for public review and comment on the Proposed Action; and
- examine and document the effects of the Proposed Action on the quality of the human environment.

PUBLIC PARTICIPATION

Public involvement in the EA process includes steps to identify and address public concerns. The Draft EA will be available for public review and comment from May 7, 2000 until 5 pm May 28, 2000 from the Region 1 FWP office. Comments regarding this EA should be submitted to FWP at the location specified below:

Mr. Dan Vincent, Regional Supervisor
Fish, Wildlife & Parks, Region 1
490 N.Meridian Road
Kalispell, Montana 59901
Phone: (406) 752-5501

PROPOSED ACTION AND ALTERNATIVES

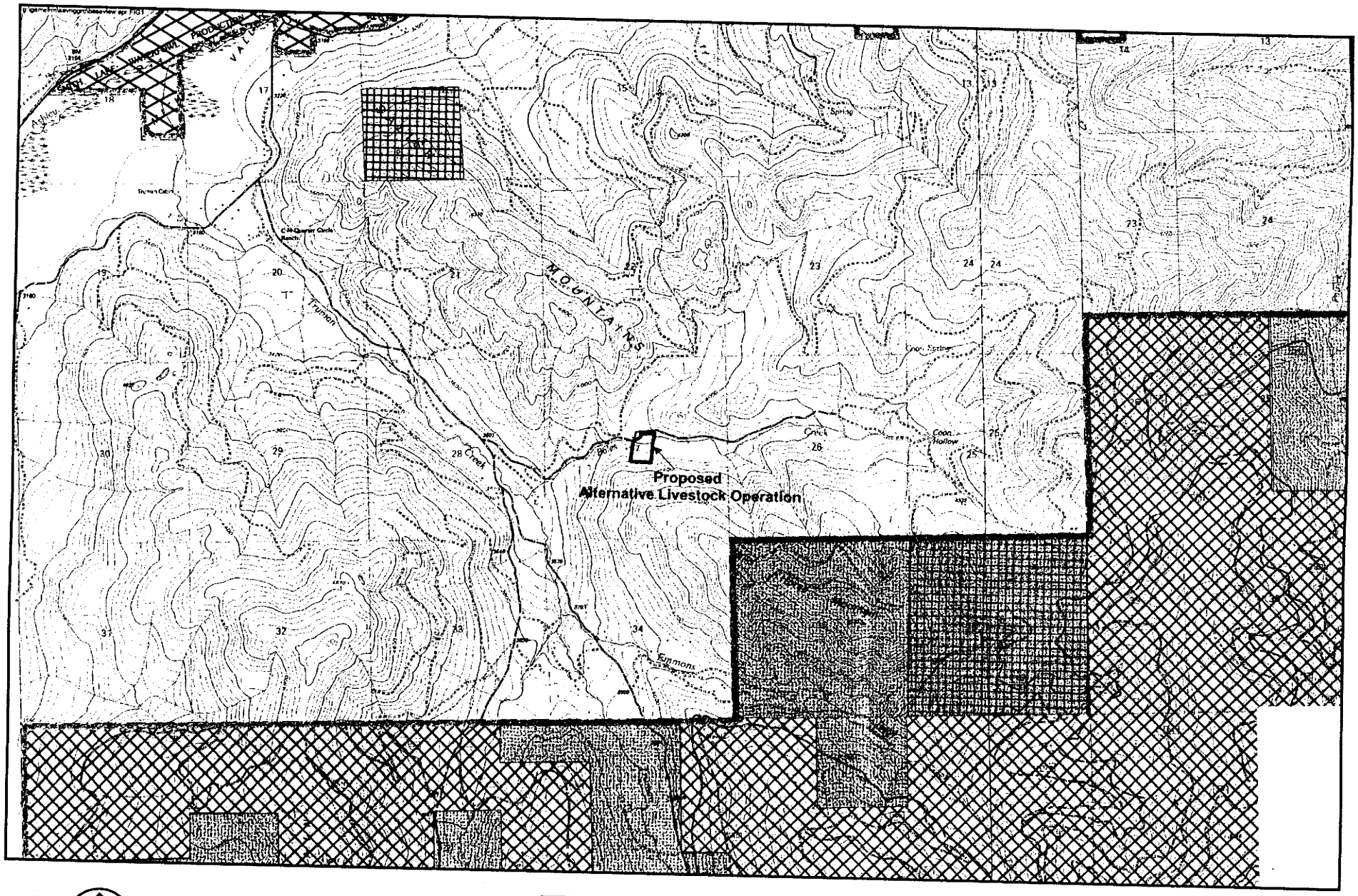
PROPOSED ACTION

FWP received an initial application on February 9, 2000 from Jay and Tina Stetson for an alternative livestock operation license in Flathead County, Montana. FWP accepted the application as complete in a letter to the Stetsons dated February 16, 2000. The proposed Saving Grace alternative livestock facility would be located approximately 5 miles southeast of Kila, Montana. The property is located on Bales Creek, about ½ mile upstream from Truman Creek, a tributary to Ashley Creek (Figure 1). The first phase would consist of up to 25 elk on 15 acres and would be completed during 2000. The second phase would be completed during 2001 and would add an additional 25 acres and an additional 35 elk to the operation. If the proposed facility is approved, the total alternative livestock operation would consist of up to 60 elk on 40 acres.

Purposes of the proposed elk ranch include: breeding stock, meat and antler production, trophy sales, and other activities such as photography. Elk to be released into the proposed facility are already owned by the applicants and are being temporarily boarded at another approved facility in Montana.

The fence gates for the facility would remain latched or locked, except for when animals are moved into or out of the enclosure, at which time the gates would be monitored to prevent ingress/egress. Several internal gates would connect the proposed pasture areas of the enclosure. As proposed the applicants would incorporate Best Management Practices for grazing on the facility, including cross fencing of the meadow portion and seasonal use of areas where saturated soil conditions are prevalent.

Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1531. Elk ranch fencing would consist of 8-foot high, high-tensile, Tightlock steel fencing. The fence bottoms would be installed to provide not more than 3 inches of ground clearance. A handling and quarantine facility will be located within the elk ranch site for purposes of handling and testing the elk; this facility will be constructed according to DoL standards and would be utilized for the proposed elk ranch operations.



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Note: Ownership Data Derived From
Montana Public Lands
U.S. Bureau of Land Management
1:100,000 Scale Maps.
Topographic Base Derived From
U.S.G.S. 1:24,000 Scale Maps.

National Forest

National Wildlife Refuge

State of Montana

Grey shade area on base map represents
Non-National Forest System lands
within the National Forest Inholdings
may exist in other National or State reservations.

Site Map
Proposed Alternative Livestock Operation
Saving Grace Elk Ranch
Flathead County, Montana
FIGURE 1

ALTERNATIVES

One alternative (No Action Alternative) is evaluated in this EA. Under the No Action Alternative, FWP would not issue a license for the operation of the Saving Grace alternative Livestock operation as proposed. Therefore, no elk ranch animals would be placed in the proposed fenced enclosure. Implementation of the No Action Alternative would not preclude other activities allowed under local, state, and federal laws to take place at the proposed elk ranch site.

PURPOSE AND NEED OF THE PROPOSED ACTION

The Saving Grace alternative livestock operation would be a private commercial enterprise that would provide for breeding stock, meat and antler production, and trophy sales. These activities do not currently occur at the property.

ROLE OF FWP AND DEPARTMENT OF LIVESTOCK

FWP is the lead agency in preparing this EA for the proposed project. This document is written in accordance with the Montana Environmental Quality Council (EQC) MEPA Handbook and FWP statutory requirements for preparing an EA under Title 75, Chapter 1, Part 2 Montana Code Annotated (MCA) and FWP rules under ARM 12.6.1520.

FWP shares regulatory responsibilities for new and expanding alternative livestock operations with the Montana Department of Livestock (DoL). The DoL is responsible for regulating the health, transportation, and identification of alternative livestock. During the application process, all quarantine area plans and specifications are submitted to the DoL for approval.

AFFECTED ENVIRONMENT

The proposed Saving Grace Elk ranch is located on fee-title land about 5 miles southeast of Kila, Montana (Figure 1). This section summarizes primary environmental resources in the project area.

LAND RESOURCES

The proposed Saving Grace Elk Ranch is located on 40 acres and is situated within and adjacent to the Bales Creek bottom lands. About 10 acres are located on a flat grassy meadow which is bisected by Bales Creek. The remaining 30 acres consists of moderate to steep sloping forested uplands located south of the creek. This area was historically used to pasture cattle, produce pasture forage, and timber production. Soil in the proposed expansion area consists primarily of silty till substratum. These soils are susceptible to compaction during saturated conditions, and have moderate erosion potential where vegetative cover is reduced or eliminated.

WATER RESOURCES

Surface water in the proposed elk farm flows west through Bales Creek which consists of a relatively small perennial channel with a low gradient. One man-made pond exists in the eastern portion of the meadow pasture, north of the creek. One spring was noted in the proposed elk farm enclosure during a site visit. This developed spring is located south of the creek on a flat timbered slope.

Several parties have irrigation water rights for Bales Creek upstream and downstream of the elk ranch site. Well records on-file with DNRC indicate that at least 5 registered water wells are located within 1 mile of the site.

VEGETATION RESOURCES

The property is primarily forested with a 10-15 acre bottomland meadow comprised primarily of forage grasses such as smooth brome. The forested land on the property consists of mature Douglas-fir, with ponderosa pine, western larch, spruce, and sub-alpine fir interspersed. Understory vegetation in the forested portion consists primarily of pinegrass and various bunchgrasses and forbs. Timber harvesting and agriculture have been primary uses of the area in the past.

There are no federally-listed threatened or endangered plant species expected to occur within the proposed elk farm site. The proposed site does contain potential for noxious weeds, especially on the road easement portion of the forest and in the bottomland meadow.

WILDLIFE RESOURCES

The proposed elk farm site and surrounding land is used by white-tailed deer, elk, moose and mule deer during all or part of the year. Winter range for white-tailed deer has been delineated adjacent and to the north and west of the property (Figure 3). Elk use the area during some winters, and known elk and mule deer winter range is located just south of the property on grassy and shrub habitats found on the western and southern exposures of Wild Horse Mountain (Figure 2 and Figure 3)). Moose likely are transient in the area during part of the year. Other wildlife species known or expected to use the area, at least on a transient basis, include black bear, mountain lion, coyote and fox. Gray wolves, bald eagles, and lynx are Federally listed as threatened or endangered and may also be transient through the general area.

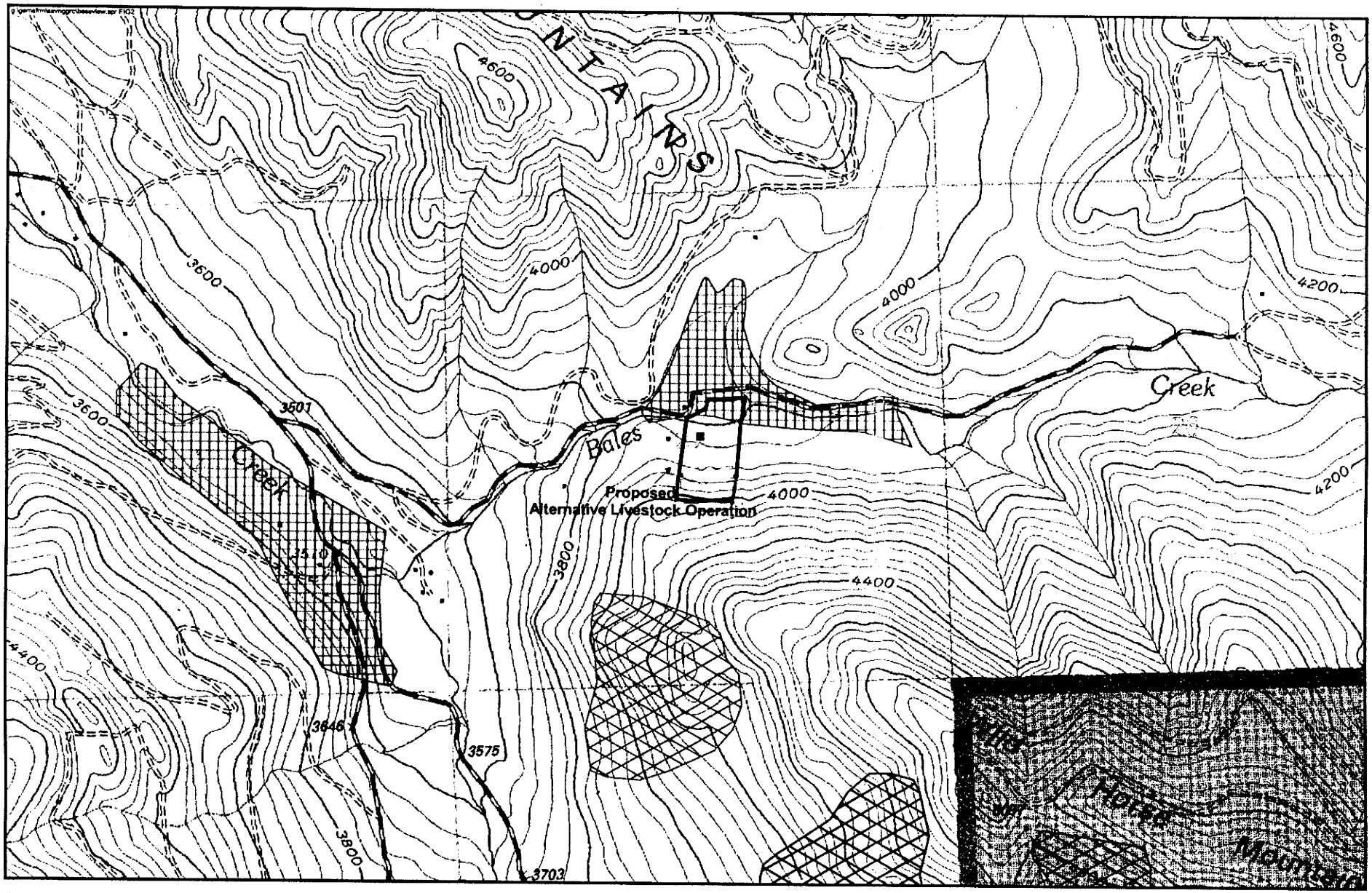
LAND USE/COMMUNITY

Most land immediately surrounding the proposed elk farm is public and private timberland and pasture grazed by livestock. Land in the general area has historically been used by the local farmers and ranchers, though recent ingress of residents on smaller subdivided parcels has occurred. The two nearest permanent residences are located approximately ¼ mile north and west of the proposed elk farm site.

Local residents in the vicinity of the proposed facility appreciate their private space and outdoor activities provided by the natural environment of the area.

RISK/HEALTH HAZARDS

There is a potential for elk to carry or become infected with contagious diseases or parasites that are transmissible to other animals Domestic livestock are currently pastured in the vicinity of the proposed facility. In order for disease transmission to occur, the organism causing the disease needs to be present. Any alternative livestock introduced to this proposed facility would be tested disease-free for tuberculosis and brucellosis, and would be in compliance with DoL regulations (monitoring for chronic wasting disease, etc.) prior to movement to the facility.



N

0 Feet 1500

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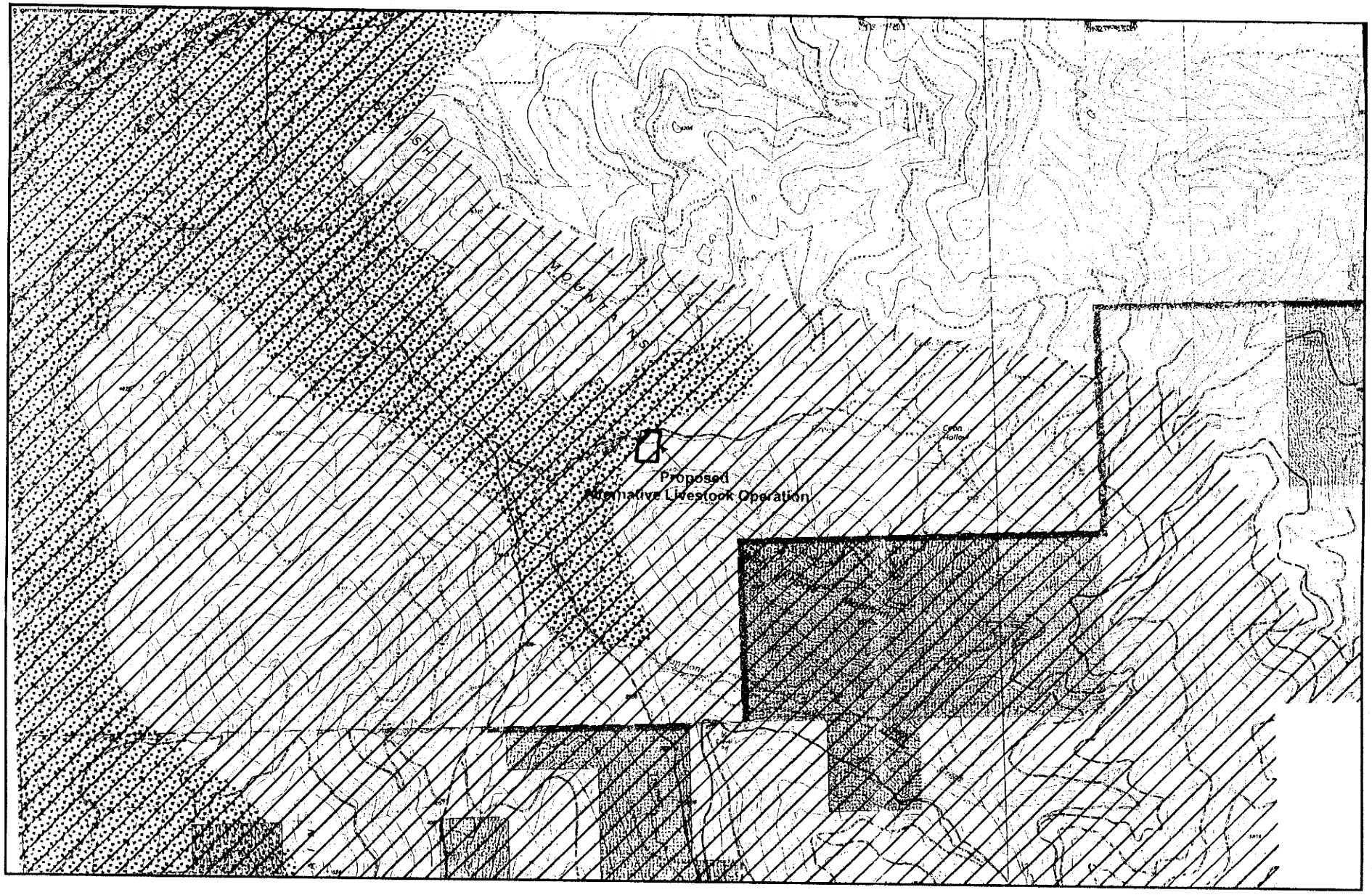
Note: Land Use Data Derived From
Montana Public Lands
U.S. Bureau of Land Management
1:250,000 Scale Maps.
Topographic Base Derived From
U.S.G.S. 1:24,000 Scale Maps.

- Crop/Pasture
- Grass Range
- Brush Rangeland
- Evergreen Forest

Grey shade area on base map represents Non-National Forest System lands within the National Forest Inholdings may exist in other National or State reservations.

Land Use / Land Cover
Proposed Alternative Livestock Operation
Saving Grace Elk Ranch
Flathead County, Montana
FIGURE 2



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Note: Data Derived From
Montana Fish, Wildlife and Parks
1:100,000 and 1:250,000 Scale Maps.
Topographic Base Derived From
U.S.G.S. 1:24,000 Scale Maps.

Moose General and Winter Range

Whitetail Deer Winter Range

Grey shade area on base map represents
Non-National Forest System lands
within the National Forest Inholdings
may exist other National or State reservations.

Big Game Distribution
Proposed Alternative Livestock Operation
Saving Grace Elk Ranch
Flathead County, Montana
FIGURE 3

ENVIRONMENTAL CONSEQUENCES

Only primary resources that have potential adverse effects from the Proposed Action are summarized in this section. Additional discussion of environmental consequences is contained in *Part II* of this EA.

LAND RESOURCES

Environmental impacts to land and soil resources associated with the Proposed Action of raising 60 elk on the 40-acre site are expected to be minor with respect to land and soil resources. The primary impact would be associated with the soil compaction and erosion potential where soil becomes exposed, which could occur if the stocking rate and/or lack of rotational grazing causes bare ground to be exposed for extended periods of time.

WATER RESOURCES

Increased runoff and erosion could occur in some areas of the elk ranch if pasture use is such that vegetative cover is diminished. The proposal to pasture up to 60 elk on the 40-acre site with supplemental feed available would be expected to reduce vegetative cover to some extent. Areas of the ranch that would be most susceptible to erosion problems are on the steep slopes, bottomland meadow, and along the stream channel banks. The extent to which erosion would occur is dependent primarily on elk density, season, and duration of use.

The exterior enclosure fence would cross Bales Creek in two locations. The fence design at these locations would be approved by FWP as game-proof. Soil erosion during periods of high flow or collection of debris (wood and/or ice) on the fence may affect the stability of the fence structure at these stream crossings.

Domestic elk fecal matter and nutrient-enriched water may have an effect on the quality of groundwater and surface water in the vicinity of the ranch (dependent upon elk density and waste management practices), primarily during periods of snow-melt, major precipitation events, and during flood conditions. Nutrients in runoff from the site likely would enter Bales Creek at the ranch site and Truman Creek farther downstream. These nutrients from the ranch would become diluted downstream and thus are not expected to have a significant adverse effect on water quality, particularly in relation to cattle-related effects that already exist in this drainage. Water quality impacts are expected to be minor and partially mitigated through implementing Best Management Practices (BMPs).

VEGETATION RESOURCES

The occupancy period for alternative livestock would be on a year-long basis. The proposed site would supply only about one-third of forage needs when fully stocked at 60 adult elk. The maximum stocking rate of about 1½ elk per acre is considered high and could contribute to the long-term decline of vegetation resources, both in terms of plant species composition and productivity of the site. Supplemental feed would be needed to sustain the elk during the non-growing season and some feed would be provided during the growing season to help reduce elk use on the native vegetation.

There are no plans to alter the native plant communities on the proposed facility. Areas where elk are fed or handled may lose vegetative cover, but this would be restricted to a small portion of the ranch. There are no known threatened or endangered plant species in this area.

Noxious weeds are possible at this site and, under an intensive elk grazing regime, would be expected to invade and subsequently increase in abundance. Weeds would likely spread quickly to disturbed areas around any site that elk are fed or handled. Weed seeds could potentially be imported into the area with elk feed and with traffic along the Bales Creek Road. The intensive maximum stocking rate would also provide opportunity for weeds to become established throughout the proposed site. The applicant would develop and implement a weed control program on the ranch. Impacts are expected to be minor and mitigated through implementing BMPs.

FISH/WILDLIFE

The exclusion of wild game from 40 acres would displace a few resident deer, elk, and moose from moderate to good quality habitat in the Bales Creek drainage. Game moving up or down the drainage would be forced to travel minimal distance to get to the same point(s) along the travel routes. Mountain lions would likely pass through this area and may be attracted to the ranch elk.

The proposed enclosure fence crosses moderate (10-20 degrees) to steep (20+ degrees) slopes on the eastern and western boundaries of the forested portions of the ranch. Steep, irregular topography can present wild elk and deer and domestic elk with a topographic advantage to jump game-proof fencing. The fence construction would include some portions in steep areas that would be built to a height of 10 feet or more. The potential for significant impacts to area wildlife due to ingress/egress risk would be mitigated to minor through strict adherence to fence construction and maintenance requirements.

LAND USE/COMMUNITY

The proposed elk ranch would be compatible with existing agricultural land uses. The ranch would result in the loss of about 10-15 acres of meadow to be used for pasturing elk. With respect to land use, no significant conflicts should result between operation of the ranch and the agricultural or residential areas. Additional homes could be constructed in the vicinity of the facility on private land. Potential effects of the elk ranch on adjacent property values is difficult to evaluate because some nearby property owners may like the idea of an elk ranch, whereas others might find it undesirable.

RISK/HEALTH HAZARDS

There is potential for transmission of water-borne disease pathogens, if present, to be transported into and out of the elk ranch, primarily from Bales Creek. This is expected to be a minor risk because of current animal disease testing requirements, lack of stagnant water in the drainage, and surface water from the creek is not expected to be used for human consumption. The route of chronic wasting disease (CWD) transmission at this time is unknown; therefore, the potential for transmission by soil, water, or other media cannot be determined, nor impacts disclosed.

The risk of disease (e.g., brucellosis and tuberculosis) being passed from elk ranch elk to wildlife and domestic livestock would be minimal if fence integrity is maintained and the requirements and/or mitigation measures described in this EA are followed. Potential for disease transmission from elk ranch animals is also mitigated through DoL disease testing requirements. Each facility is required to have access to an isolation pen (quarantine facility) on the property or an approved quarantine plan to isolate any animals that are imported or become ill. Steep slopes, snow drift-prone areas, and stream crossings along the perimeter fence of the proposed elk ranch have the potential to affect fence integrity. These issues are discussed in the "Wildlife Resources" and "Water Resources" sections.

The nearest two permanent residences are located within 1/4 mile north and west of the proposed elk ranch site. Other residences are sparsely located at greater distances from the site. Several county roads are located within 3 miles of the proposed facility.

CUMULATIVE EFFECTS

The Proposed Action would result in potential impacts that are individually minor, but not cumulatively significant. Due to the sparsely populated area in the vicinity of the proposed alternative livestock facility, no significant cumulative impacts to local residents, wildlife, or habitat are expected.

EA CONCLUSION

MEPA and alternative livestock licensing statutes require FWP to conduct an environmental analysis for alternative livestock operations licensing as described in the *Introduction* of this *Summary* section (p. 1). FWP prepares EAs to determine whether a project would have a significant effect on the environment. If FWP determines that a project would have a significant impact that could not be mitigated to less than significant, the FWP would prepare a more detailed EIS before making a decision.

Based on the criteria evaluated in this EA, an EIS would not be required for the Saving Grace Elk Ranch. The appropriate level of analysis for the Proposed Action is a mitigated EA because all impacts of the Proposed Action have been accurately identified in the EA, and all identified significant impacts would be mitigated to minor or none.

STIPULATIONS, REQUIREMENTS, AND MITIGATION MEASURES

The stipulations and mitigation measures described in this section address potential impacts identified for the proposed Saving Grace Elk Ranch Alternative Livestock license. FWP would require stipulations to ensure that the fence enclosure is maintained in game-proof condition. Potential minor impacts from the Proposed Action are addressed as mitigation measures that are strongly recommended to remain in compliance with state and federal environmental laws, but are not required.

REQUIREMENTS

The following requirements, which have been agreed to by the applicant, are imposed by FWP for the Saving Grace Elk Ranch and are designed to ensure that the fence enclosure is maintained in game-proof condition:

(1) Licensee shall inspect the perimeter fence on a regular basis and immediately after or during events that have a greater probability of damaging the fence (e.g., high streamflow/flooding periods; spring ice break-up) to insure fence integrity with respect to stream debris, erosional stream flows, ice jams, burrowing animals, predators, and other game animals. If it appears that fence integrity may be compromised because of high streamflow, flooding, and/or ice conditions in the Bales Creek drainage, the licensee shall immediately remove all elk from the stream bottomland pasture(s). If repairs are required of the perimeter fence at one or both of the stream crossing sites, no elk shall be placed back into these pastures until the fence is inspected for game-proof condition by a FWP representative. Should ingress or egress become a problem during winter due to areas of snow accumulation, areas prone to snow drifting shall be identified and the fence height raised sufficiently to prevent ingress/egress. Additional remedial actions may be required by FWP if the measures discussed above do not adequately prevent ingress/egress, including possible installation of an interior fence to separate Bales Creek from the remainder of the elk ranch.

(2) The licensee shall submit a written fence monitoring plan to FWP for approval prior to issuance of the license. The fence monitoring plan shall include information on how elk would be removed from the bottom areas within 24 hours if necessary; how the stream crossing sites would be monitored during the period that high flows typically can occur (March - July); and how the fence would be maintained in a game-proof condition at the stream crossing sites.

These two requirements are imposed to mitigate a potentially significant risk to fence integrity and the resulting potential for ingress/egress of domestic elk and wildlife. Without these requirements, risk to livestock and wildlife from contact with domestic animals would have the potential to be significant, due to the site being located in an area currently utilized by wild game, and because of two fenced crossings of Bales Creek. Regular fence monitoring and a written fence monitoring plan is required so that FWP has a level of confidence that potential fence integrity problems can be detected promptly.

RECOMMENDED MITIGATION MEASURES

The following recommended mitigation measures address minor impacts identified in the Saving Grace Elk Ranch EA for resources that have the most potential effects from the Proposed Action:

Land Resources

- Maintain a reasonable stocking rate within the enclosure to minimize changes in soil structure and potential increases in compaction and subsequent erosion from disturbed ground.

Air Resources

- Employ the following BMPs to reduce odor problems if they occur: (1) incorporate waste into soil quickly by plowing or disking; (2) spread waste during cool weather or in the morning during warm, dry weather; and (3) properly dispose of animal carcasses. Carcasses should not be disposed of in or adjacent to water bodies, roads, and ditches.

Water Resources

- Maintain a reasonable stocking rate in the area to mitigate potential impacts from runoff and fecal matter. Potential water quality impacts also could be minimized by disposing dead animals and excess fecal material at a site that is isolated from surface water and groundwater (disposal must meet county regulations for solid waste if applicable).

- For any areas that may have erosion and sedimentation problems, utilize BMPs where surface water could enter Bales Creek. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences to be used on a seasonal basis.

- Clear debris promptly that may collect at the fenced stream crossings to reduce the potential for flooding and fence damage.

Vegetation Resources

- Monitor the ranch site for invasion of noxious weeds and treat affected areas in a timely manner. Should noxious weeds continue to be detected, a weed control program should be implemented, if not already in place, to control the weeds.

- Provide supplemental feed and minerals to the elk on a year-round basis to reduce excessive

grazing on preferred pasture plants.

- Create interior pastures such that rotational grazing strategies can be implemented to reduce adverse impacts to vegetation on bottomland and forested pastures.

Wildlife Resources

- Store hay, feed, and salt away from exterior fences or enclose in bear-resistant containers or buildings.

- Feed elk ranch animals at interior portions of the enclosure and not along the perimeter fence.

- Remove dead animals, excess fecal material, and waste feed from the ranch and deposit at an approved site not likely to be used by humans, and domestic and wild animals.

- Adjust fence requirements to include double fencing, internal fencing, electrification, or increased height if fence integrity or ingress/egress becomes a problem.

Noise

- Reduce the number of bull elk during the rut if excess noise from bugling results in substantial complaints.

Risk/Health Hazards

- The mitigation measures recommended above for Vegetation and Wildlife Resources are applicable to this section. In addition, risk of disease epidemic or heavy parasite infections among domestic elk can be minimized by maintaining a reasonable domestic elk stocking rate in relation to the enclosure size, periodic removal of manure from concentration areas, and development of a disease immunization and parasite treatment protocol as applicable to domestic elk.

Cultural & Historical Resources

- If archeological artifacts are observed during construction of the enclosure fence or from other activities, work should stop in the area and the discovery reported to the Montana Historical Society in Helena. If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs and preserve the artifact(s).

PART I. ALTERNATIVE LIVESTOCK OPERATION LICENSE APPLICATION

Montana Fish, Wildlife & Park's authority to regulate alternative livestock operations is contained in sections

ENVIRONMENTAL ASSESSMENT CHECKLIST

87-4-406 through 87-4-424, MCA and ARM 12.6.1501 through 12.6.1519.

1. **Name of Project:** Saving Grace Elk Ranch

   Date of Acceptance of Completed Application: February 16, 2000

2. **Name, Address and Phone Number of Applicant(s):**

   Jay and Tina Stetson
   Box 694
   1480 Coon Hollow Road
   Kila, MT 59920 Ph. 755-5825

3. **If Applicable:**

   Estimated Construction/Commencement Date: June, 2000

   Estimated Completion Date: June, 2002

   Is this an application for expansion of existing facility or is a future expansion contemplated?

   No

4. **Location Affected by Proposed Action (county, range and township):**
   Flathead County, 40 acres in the following:
   SW portion of Section 27; Township 27 North, Range 22 West

5. **Project Size:** Estimate number of acres that would be directly affected that are currently:

   (a) Developed:
   residential.....3_____acres
   industrial....._____acres

   (b) Open Space/Woodlands/Areas...._____acres

   (c) Wetlands/Riparian Areas..... 2_____acres

   (d) Floodplain... 10_____acres

   (e) Productive:
   irrigated cropland._____acres
   dry cropland..... _____acres
   forestry..... 25 acres
   rangeland..... _____acres
   other....._____acres

6. **Map/site plan:**

The following maps are included in the introductory summary of this EA:

Figure 1: Site Map
Figure 2: Land Use / Land Cover
Figure 3: Big Game Distribution

7. **Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action:**

Montana Fish, Wildlife, and Parks (FWP) received an application for an alternative livestock operation license from Jay and Tina Stetson on February 9, 2000 to construct a 40-acre elk facility in Flathead County (Figure 1). This application was accepted on February 16, 2000, initiating a 120-day review process. The proposed Saving Grace alternative livestock facility would be located approximately 5 miles southeast of Kila, Montana. It is located on Bales Creek, about ½ mile upstream from Truman Creek, a tributary to Ashley Creek. The applicant would live adjacent to the facility year-round.

The applicant stated he would like to eventually place a maximum of 60 adult elk within a 40-acre enclosure for the purpose of breeding stock, meat production, antler production, perhaps trophy sales, and other uses (such as photography). The commercial shooting of elk would not occur. During a site visit by FWP on April 6, 2000, the applicant stated he would like to make some clarifications and corrections to the application. Most importantly, he would like to construct the facility in two phases over the next two years. Construction of Phase I would begin in spring 2000 and would involve approximately 15 acres near his residence. Phase II would begin later in 2000 or 2001 and would involve an additional 25 acres of forested land on the property. The number of elk present within the enclosure would be dependent upon the phase of construction completed. The applicant indicated verbally on April 6, 2000 that Phase I would involve fewer than 25 animals. Phase II may involve an additional 35 animals. Both phases of construction are addressed in this EA. Total acreage to be enclosed would be about 40 acres.

Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1533. The exterior fence for the enclosures would consist of 8-foot-high Tightlock steel fencing. Fence height on steeper slopes would be at least 10 feet. A handling facility would be constructed according to DoL standards approximately 50 yards from the residence. Water for the elk would be provided via Bales Creek and a developed spring located on the property. Supplemental feeding would likely occur during winter and during drier portions of the year, with some oats/grain being provided daily on a year-round basis.

The proposed facility would have several interior fences, especially within the area identified for Phase I. There would be two and possibly three exterior gates for the Phase I and II areas due to the Plum Creek road easement that bisects the Phase I portion of the property. No exterior gate is proposed for the Phase II portion of the project. Interior fences will be constructed to facilitate movement of elk between pastures and the quarantine facility in both Phase I and II areas.

8. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction:**

(a) Permits:

Agency Name	Permit	Approval Date and Number
Department of Livestock	approval of quarantine and handling facility	Pending

(b) Funding:

Agency Name	Funding Amount
None	

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
- Montana Department of Livestock (DoL)	disease control
- Montana Department of Environmental Quality (DEQ)	water quality, air quality waste management
- Montana State Historical Preservation Office (SHPO)	cultural resources
- Montana Department of Natural Resources and Conservation (DNRC)	water rights
- Natural Resource Conservation Service (NRCS)	soil conservation
- Flathead County Conservation District	stream crossings
- Flathead County Weed Control District	weed control
- Flathead County Tax Department	tax assessment

9. **List of Agencies Consulted During Preparation of the EA:**

Montana Department of Livestock
Montana Department of Environmental Quality
Montana State Historical Preservation Office
Montana Department of Natural Resources and Conservation
Flathead County Conservation District
Flathead County Tax Department

REFERENCES:

Stetson, Jay and Tina. 2000. Application for Saving Grace Elk Ranch Alternative Livestock Operation, dated January 15, 2000.

Montana Fish, Wildlife, and Parks. 2000. Communication RE: Big game and other wildlife use and occurrence in the Bales Creek and surrounding areas.

PART II. ENVIRONMENTAL REVIEW

This section of the EA presents results of an environmental review of the proposed Saving Grace Elk Ranch Alternative Livestock Operation (Proposed Action). The assessment evaluated direct and indirect impacts and cumulative effects of the Proposed Action on the following resources of the physical environment:: land, air, water, vegetation, fish and wildlife; and the following concerns of the human environment: noise, land use, human health risk, community impacts, public services and taxes, aesthetics and recreation, and cultural and historical resources. Impacts were determined to fall in one of four categories: unknown, none, minor and significant. For the purposes of this EA, and in accordance with ARM 12.6.1525, these terms are defined as follows:

EA DEFINITIONS

Cumulative Effects: Collective impacts on the physical and human environment of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impacts statement evaluation, or permit processing procedures.

Unknown Impacts: Information is not available to facilitate a reasonable prediction of potential impacts.

Significant Impacts: A determination of significance of an impact in this EA is based on individual and cumulative impacts from the Proposed Action. If the Proposed Action results in significant impacts that can not be effectively mitigated, FWP must prepare an EIS. The following criteria are considered in determining the significance of each impact on the quality of the human environment:

- severity, duration, geographic extent and frequency of occurrence of the impact;
- probability that the impact would occur if the Proposed Action occurs;
- growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative effects;
- quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
- importance to the state and to society of each environmental resource or value that would be affected;
- any precedent that would be set as a result of an impact of the Proposed Action that would commit FWP to future actions with significant impacts or a decision in principle about such future actions; and
- potential conflict with local, state, or federal laws, requirements, or formal plans.

Reasonable Stocking Rate: The density of animals appropriate to maintain vegetative cover in pasture condition that minimizes soil erosion from major precipitation events and snowmelt. Factors to consider in determining an overall reasonable stocking rate include vegetation type and density, ground slope, soil type, and precipitation.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Would Proposed Action result in:	Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?			X		Yes	1(b)
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				

AFFECTED ENVIRONMENT:

The proposed Saving Grace alternative livestock operation (ALO) is located five miles southeast of Kila, Montana. The property is situated along the foot of Wild Horse Mountain adjacent to Bales Creek at an elevation of about 3,800 feet above mean sea level. About one-third of the 40-acre ALO lies in open, gently-sloping valley bottom of Bales Creek with the balance of the property located in forested terrain. Timber has been cut from portions of the property. Current land use in the area is silviculture and livestock pasture.

General topography of the area is dominated by glacial features resulting from the late Wisconsin Cordilleran ice sheet that covered the land surfaces of northwest Montana to an elevation of 5,100 feet (Johns, 1970, p. 7). Glaciofluvial features include glaciated mountain ridges and slopes, and glacial moraines. Bedrock is predominantly metasedimentary rocks of the preCambrian Belt Series Formation. Slopes range from gently sloping in the Bales Creek drainage to moderately steep on the forested footslopes.

Site specific soil information is not available for this property. However, soil data for similar landscapes are available in the Soil Survey of the Flathead National Forest Area, Montana (Martinson and Basko, undated). Soils in this survey that are present along the valley bottoms in nearby streams have been mapped as Typic Eutroboralfs, silty till substratum, and rolling. These soils are primarily volcanic ash influenced silt loams formed on glacial moraines, and contain 35 to 50% rock fragments in the subsoil horizons. Typic Eutroboralfs have moderate erosion potential where vegetative cover is reduced.

A site visit conducted in April 2000 indicated soil in the Bales Creek valley bottom is silty and likely wet during some times of the year. This soil is susceptible to compaction during saturated conditions, which, if increased markedly, can cause an increase in runoff and erosion, especially if vegtetative cover is significantly reduced or eliminated

PROPOSED ACTION:

1(b) Environmental impacts to land and soil resources associated with the proposed action of raising 60 elk on the 40 acre site are directly related to the stocking rate, season, and duration of use in each pasture. The portion of the proposed ALO where moderately steep slopes are present will produce erosion if an adequate vegetative cover is not maintained. The flat creek bottom portions could potentially become compacted and devegetated if overstocking and intense use during the wet season occurs. Maintaining vegetative cover through a reasonable stocking rate should effectively avoid potential erosion problems.

The seasonally wet soil and wetland areas in the valley bottom along Bales Creek present a risk of compaction and disruption if prolonged heavy use by elk occurs, especially during the wet periods of the year. This could result in increased sedimentation to the creek. Potential overuse could be avoided by cross-fencing or other means to direct use for water access and to allow for flexibility in the control of grazing use.

NO ACTION:

Under the no action alternative, the current condition of the property would not change relative to use by alternative livestock and no related impacts to soil and land resources are expected. If logging activities become extensive in the forested areas of the property, impacts to soil resources could be realized from local increases in erosion.

CUMULATIVE EFFECTS:

The cumulative effects of using the proposed area as an ALO are expected to be minor . The proposed permit area does not contain any unique or significant soil or land resources that would be lost due to the proposed land use change.

REQUIRED STIPULATIONS:

None

RECOMMENDED MITIGATION MEASURES:

Maintain a reasonable stocking rate on wet areas within the elk ranch enclosures to minimize changes in soil structure and potential increases in runoff and erosion to Bales Creek from disturbed ground. A "reasonable stocking rate" in this case would include rotational grazing strategies that limit periods of time that elk would be using any one pasture in order to reduce potential for devegetation and erosion.

REFERENCES:

Johns, Willis M. 1970. Geology and Mineral Deposits of Lincoln and Flathead Counties, Montana. Montana Bureau of Mines and Geology, Butte, Montana, Bulletin 79. 182 pages with maps.

U.S. Department of Agriculture, Natural Resources Conservation Service. Unpublished soil survey data provided by Leschin, Soil Scientist, Kalispell field office, April 7, 1998.

Martinson, A.H., and W.J. Basko. undated. Soil Survey of the Flathead National Forest Area, Montana. United States Department of Agriculture, Forest Service and Soil Conservation Service in Cooperation with Montana Agricultural Experiment Station.

2. AIR Will the Proposed Action result in:	Impact				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Emission of air pollutants or deterioration of ambient air quality? (also see 13 (c))		X				
b. Creation of objectionable odors?			X		Yes	2(b)
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				

AFFECTED ENVIRONMENT:

Land surrounding the proposed Saving Grace alternative livestock facility is primarily forested. The area is sparsely populated with no apparent air quality problems.

PROPOSED ACTION:

Odor problems may result from animal waste in areas where elk congregate to feed. These odors are likely similar to those resulting from use of the site to pasture other livestock such as cattle or horses. Residences in the area are sufficiently scattered so that any odors associated with the facility are not expected to be a problem during most times of the year, especially if a reasonable stocking rate is maintained.

NO ACTION:

The odors associated with the current level of big game grazing would remain the same.

CUMULATIVE EFFECTS:

As the drainage is already used for timber production, the cumulative effect of the elk operation is expected to be minimal.

REQUIRED STIPULATIONS

None

RECOMMENDED MITIGATIONS:

- Employ the following best management practices (BMPs) to reduce odor problems if they occur:
- Quickly incorporate accumulated waste into soil by plowing or disking as appropriate;
- Spread waste during cool weather or in morning hours; and,
- Properly dispose of animal carcasses according to county solid waste regulations. Carcasses and fecal matter should not be disposed of in or adjacent to water bodies, roads, or ditches.

These and other BMPs are described in "Guide to Animal Waste Management and Water Quality Protection in Montana" (MDEQ 1996).

REFERENCES:

Montana Department of Environmental Quality (MDEQ). 1996 Guide to Animal Waste Management and Water Quality Protection in Montana. Helena MT.

3. WATER Will the Proposed Action result in:	Impact				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X		Yes	3(a)
b. Changes in drainage patterns or the rate and amount of surface runoff?			X		Yes	3(b)
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?			X		Yes	3(h)
I. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?			X		Yes	3(k)

AFFECTED ENVIRONMENT:

The proposed facility is located on 40 acres in the Bales Creek drainage approximately ½ mile upstream of its confluence with Truman Creek (Figure 1). A ¼-mile long segment of Bales Creek flows through the bottomland portion of the area. Metal culverts are currently in place on the creek where the driveway enters the property, and a temporary crossing also exists upstream from the driveway and downstream of the proposed meadow enclosure. One 20 foot diameter pond is located in the northeast portion of the property north of the creek, within the proposed meadow enclosure. Surface water from the proposed facility would flow west in Bales Creek to Truman Creek and then to Ashley Creek approximately 2 miles north west of the site. Flow in Bales Creek was estimated at approximately 1 cubic foot per second (cfs). There are no plans to irrigate within the enclosure. Surface saturation of the meadow portion of the facility

appears likely during runoff periods under normal conditions, and there is potential that spring runoff from the proposed facility would reach Bales Creek and possibly Truman Creek during most years.

Drinking water for the elk would be provided from a developed spring, a domestic well, and from Bales Creek. Approximately five water supply wells are located in the western half of Section 27, where the property is located. Total depths of these wells range from 125 to 302 feet (DNRC 2000). Approximately 11 surface water rights for Bales Creek located upstream and downstream of the proposed facility are listed with the Montana Department of Natural Resources and Conservation (DNRC 2000).

PROPOSED ACTION:

3 (a, b, h, k). A maximum stocking rate of 60 elk at full buildout of the proposed facility may lead to soil compaction and increased runoff, especially during spring and immediately following heavy rains. This will be especially true in areas where elk congregate or if large numbers are confined in small internal enclosures. Most of the surface water from the enclosure is drained by Bales Creek. Fecal contamination may lead to increased nitrogen levels in surface runoff. However, it is doubtful an increase in nitrogen would be detectable in Ashley Creek as a result of this facility. Given the planned stocking level, it is also doubtful area wells would be threatened by fecal contamination. Stocking levels in the various enclosures would be regulated by rotational grazing strategies to ensure that excessive compaction and baring of soil does not occur.

NO ACTION:

Current hydrologic conditions are not expected to change under the No Action alternative.

CUMULATIVE EFFECTS:

The general area is used for logging and minimal grazing. These activities likely have minor effects on water quality due to increased sedimentation and nutrient loading. Use of the land to raise elk is not expected to significantly change hydrologic conditions at the site, given the proposed use of multiple pastures and rotational grazing strategies. Therefore, the cumulative effect of using the approximately 40-acre site for the rearing of captive elk would not likely cause cumulative effects on water resources.

COMMENTS:

The Montana Department of Environmental Quality (DEQ) administers and enforces water quality laws (e.g. Clean Water Act and Montana Water Quality Act) relating to pollution from point and nonpoint sources. If vegetative cover is reduced significantly, the operation could meet the definition of a "concentrated animal feeding operation" (CAFO) (ARM 17.30.1304(3)). However, a CAFO permit is not expected to be required for the proposed alternative livestock operation.

REQUIRED STIPULATIONS:

None.

RECOMMENDED MITIGATION MEASURES:

- Maintain a reasonable stocking rate in the proposed facility (see Land Resources section above) to mitigate potential impacts from erosion and fecal matter. Dispose of dead animals and excess fecal matter according to county waste regulations.

- Control surface water discharges from the proposed site, if they occur, by employing BMPs where runoff might enter Bales Creek. The BMPs may include earthen berms, vegetative (willow plantings) buffer zones, straw bale dikes, or silt fences during portions of the year. The

booklet "Common Sense and Water Quality , a Handbook for Livestock Producers" (Montana Department of Heath and Environmental Sciences, 1994) is recommended for further mitigation measures.

- Clear debris promptly that may collect at the fenced stream crossings to reduce potential for flooding and fence damage.

REFERENCES:

Montana Department of Natural Resources and Conservation (DNRC), 2000. Search of well records on Internet for Flathead County.

Montana Department of Health and Environmental Sciences (DHES), 2000. Common Sense and Water Quality , a Handbook for Livestock Producers.

4. VEGETATION Will the Proposed Action result in:	Impact				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			X		Yes	4(a)
b. Alteration of a plant community?			X		Yes	4(b)
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X		Yes	4(e)

AFFECTED ENVIRONMENT:

The proposed facility is primarily forested, with some grassy bottomland comprised primarily of various bunchgrasses and pinegrass. Timber harvesting and agriculture have been a primary uses in the area in the past and the additional removal of trees is planned. However, with the year-round presence of captive elk, the natural regeneration of trees will be reduced. Gradually, the area may convert to a more grass-dominated habitat in the forest understory than occurs now. Noxious weeds such as knapweed, thistle could potentially increase above current levels due to the continuous effects of grazing. There are no known federally listed, threatened, or endangered plant species within the project area.

PROPOSED ACTION:

4 (a, b, e). The presence of 60 head of elk within a 40-acre enclosure would affect plant species composition and abundance, especially if supplemental feeding does not occur. Even though the applicant has stated plans to conduct additional thinning operations within the project area, the additional forage produced will be insufficient if such a large herd is maintained. If elk are rotated between pastures on a regular basis (as the applicant has indicated), associated impacts on plant species and diversity will be considerably less. When supplemental feeding occurs, only certified weed free hay or pellets are recommended to minimize the introduction of exotic weeds. An aggressive weed control program as proposed by the applicant should limit the spread of any noxious or undesirable plant species that are introduced.

NO ACTION:

Current vegetative communities are not expected to change appreciably unless stocking density and duration are such that vegetative cover is diminished and noxious weeds or other undesirable plant species invade and become dominant.

CUMULATIVE EFFECTS:

There are no anticipated cumulative effects on vegetation resources associated with the project as proposed.

REQUIRED STIPULATIONS:

None

RECOMMENDED MITIGATION MEASURES:

- Monitor the proposed alternative livestock site for invasion of noxious weeds and treat affected areas in a timely manner by implementing a noxious weed control program.
- Supplemental feed and minerals should be provided to the elk on a seasonal basis to reduce excessive grazing on preferred pasture plants.

5. FISH/WILDLIFE Will thePproposed Action result in:	Impact				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?			X		No	5(a)
b. Changes in the diversity or abundance of game animals or bird species?			X		Unk	5(b)
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?			X		No	5(e)
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				

AFFECTED ENVIRONMENT:

White-tailed deer and elk currently use the proposed site on a year-round basis, though delineated white-tailed deer winter range occurs to the north and west of the property. Mule deer may also use the area for winter range, especially during mild winters. Moose, black bears and mountain lions reside in the general area and undoubtedly frequent the project site. Gray wolves and bald eagles are Federally listed as threatened or endangered and may be transient through the area.

PROPOSED ACTION:

5 (a, b, e). Establishment of an alternative livestock facility will exclude wild deer, elk, and moose from using approximately 40 acres of habitat that is currently used by them when both phases of the proposed facility are constructed. The exclusion of wild animals from this area will slightly reduce carrying capacity, but not to a level that is measurable. The movements of individual animals may be altered, but little or no effect on the overall movement of wild game herds is expected. No effects are expected on threatened or endangered species.

There is a slight possibility that wild deer, elk, or moose could enter the proposed facility, especially during periods of deep snow accumulation or drifting in winter. Deer may also be able to crawl under game-proof fencing at sites dug by coyotes, though this is not considered likely under normal circumstances. Wild elk may be attracted to the domestic elk and may try to enter the facility, especially during the mating season. Wild deer, elk, and moose entering the proposed facility would likely be destroyed rather than released back to the wild to reduce any chance of disease transmission to wild herds. The licensee may request FWP to conduct disease testing, at the licensee's expense, of the ingressed animals to assure no disease exposure has occurred.

A secondary concern regards the escape of captive elk and involves the potential for interbreeding of captive elk that have red deer genes with wild elk. Red deer are not native to North America and red deer genes still occur on some alternative livestock operations in Montana (FWP files), even though efforts are underway to eliminate their presence with testing and eventual removal. Should wild elk interbreed with captive elk that have red deer genes, there is some concern that their progeny will negatively affect wild populations. In addition to concerns regarding the interbreeding of wild elk with captive elk that have red deer genes, there are also concerns regarding interbreeding of wild elk with domestic elk whose genetic make-up has been altered through several generations of selective breeding.

Regarding the issue of red deer hybridization with wild elk, the DoL and FWP have administrative rules in place requiring all elk on alternative livestock operations in Montana that are born on or prior to December 31, 1999, be tested for elk-red deer hybridization by January 1, 2000. In addition, all elk born between January 1, 2000, and December 31, 2001, shall be tested for elk-red deer hybridization by January 1 of the year following the year of birth, or when the animal is sold or transported from the alternative livestock operation, whichever comes first. Any elk-red deer hybrid that is detected must be neutered, slaughtered or sold out of state. These regulations mitigate the concern for potential hybridization because all elk purchased by the applicant would be tested prior to transport to the proposed alternative livestock ranch. Moreover, the fencing requirements and suggested mitigation measures would limit the potential for ingress and egress.

During the 1999 Montana Legislative Session, the Montana Legislature adopted a series of measures referred to as "Negotiated Rules" that related to alternative livestock issues. One of the measures included a provision that excluded the ingress of bears and mountain lions into captive facilities as grounds for revocation of a license. Should bears, lions, or other predators enter the facility, they will likely be live-captured and removed rather than destroyed.

NO ACTION:

No wildlife-related impacts are expected to occur under the "No Action" alternative. Use of the general area for timber production and grazing would continue.

CUMULATIVE EFFECTS:

There are no anticipated cumulative effects on wildlife resources associated with this proposed project.

COMMENTS:

In order to provide assurance to FWP that the alternative livestock facility external fence can be maintained in game-proof condition, two requirements have been developed and agreed to by the applicant:

REQUIRED STIPULATIONS (Requirements):

(1) Licensee shall inspect the perimeter fence on a regular basis and immediately after or during events that have a greater probability of damaging the fence (e.g., high streamflow/flooding periods; spring ice break-up) to insure fence integrity with respect to stream debris, erosional stream flows, ice jams, burrowing animals, predators, and other game animals. If it appears that fence integrity may be compromised because of high streamflow, flooding, and/or ice conditions in the Bales Creek drainage, the licensee shall immediately remove all elk from the stream bottomland pasture(s). If repairs are required of the perimeter fence at one or both of the stream crossing sites, no elk shall be placed back into these pastures until the fence is inspected for game-proof condition by a FWP representative. Should ingress or egress become a problem during winter due to areas of snow accumulation, areas prone to snow drifting shall be identified and the fence height raised sufficiently

discussed above do not adequately prevent ingress/egress, including possible installation of an interior fence to separate Bales Creek from the remainder of the elk ranch.

(2) The licensee shall submit a written fence monitoring plan to FWP for approval prior to issuance of the license. The fence monitoring plan shall include information on how elk would be removed from the bottom areas within 24 hours if necessary; how the stream crossing sites would be monitored during the period that high flows typically can occur (March - July); and how the fence would be maintained in a game-proof condition at the stream crossing sites.

RECOMMENDED MITIGATION MEASURES:

The following management practices will help to minimize impacts to free- ranging wildlife species. Implementing these mitigation measures, most of which are standard practices, is highly recommended.

- Store hay, feed, or salt away from exterior fences or enclosed in bear-resistant containers or buildings.
- Feed captive elk at interior portions of the enclosure and not along the perimeter fence. Extra caution should be taken to limit the exposure of animal feeds to bears.
- Remove excess fecal material and waste feed from the alternative livestock facility and deposit at a site not likely to be used by humans or domestic or wild animals.
- Portions of the exterior fence that bisect slopes of 20 to 40% steepness should be constructed to a height of at least 10 feet, as the applicant has agreed to do.

SUMMARY OF POTENTIAL IMPACTS TO WILDLIFE:

1) Wildlife use of the area and potential for through-the-fence contact with alternative livestock (consider year-round use, traditional seasonal habitat use, and location of travel routes and migration corridors).

Given the year-round use of the area by deer, elk, and moose, the potential for nose-to-nose contact through the fence is considerable and increases during the winter months. This risk of contact can be reduced by feeding domestic elk at interior portions of enclosures rather than along exterior fences and by closely monitoring exterior fences on a daily or regular basis.

The frequency of fence line contact between domestic elk and wildlife and the risk that this contact might result in disease transmission is mitigated by disease testing requirements. In order for disease transmission to occur, the organism causing the disease needs to be present. Any alternative livestock introduced to this proposed facility will be tested disease-free prior to movement to the facility.

2) Potential for escape of alternative livestock or ingress of wildlife (consider site-specific factors that could reduce the effectiveness of perimeter fences built to the standards outlines in Rule 12.6.1503A, including steepness of terrain, winter snow depths/drifting, susceptibility of fences to flood damage, etc.).

The majority of the proposed facility is forested, as is the surrounding area. While all noticeable trees susceptible to wind-throw have been or will be removed from the fence perimeter, hundreds of trees will remain that could strike and damage the fence during periods of high winds or major rain and snow events. During the winter of 1996-97, snow depths in the area reached 3-4 feet deep, although that winter was considered by some meteorologists as a 1-in-300-year event. Typically, winter snow depths in this area are less than 16 inches. However, blowing and drifting snow could be a concern during many of western Montana's winters.

Portions of the exterior fence will bisect slopes of moderate (20-40%) steepness. The applicant has agreed to construct fences at least 10' high in those areas. Under normal conditions, this will help to prevent ingress or egress. Should blowing and drifting snow become an immediate concern, snow removal along the majority of the exterior fence will not be possible due to slope steepness.

3) Proportion (%) of the total habitat area currently used by wildlife that will be enclosed or otherwise impacted.

Wildlife currently use many thousands of acres in the area, even during the more restricted winter months. The proportion of habitat excluded by the proposed facility constitutes far less than 1% of the area.

B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will Proposed Action result in:	Impact				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				

PROPOSED ACTION:

No impacts to existing noise levels are expected, except from bull elk bugling during the mating season. Given the few number of close neighbors in the vicinity, this is not expected to be a problem.

NO ACTION:

No impacts to existing noise levels are expected.

COMMENTS:

No stipulations or mitigation measures are required or recommended.

7. LAND USE Will the proposed action result in:	Impact				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Conflict with any existing land use that would be adversely affected by the proposed action?			X		Yes	7(d)
e. Adverse effects on or relocation of residences?			X		Yes	7(e)

AFFECTED ENVIRONMENT:

Plum Creek Timber Company and relatively large blocks of private land (>20 acres) dominate the area. This general area has been primarily used for timber harvesting and agriculture in the past.

PROPOSED ACTION:

While some level of timber management within the enclosure will undoubtedly continue into the future, the open grazing of the area by neighboring livestock will be prevented on approximately 40 acres with the construction of the game-proof fence. One of the neighbors located on the west side of the proposed facility may have the 8-foot-high Tightlock fence within view of his residence and other neighbors driving the Bales Creek road will see the fence. Fence visibility may or may not be a concern for area residents.

7 (d, e). The proposed alternative livestock operation would be compatible with existing agricultural land uses. With respect to land use, no significant conflicts should result between elk ranch operation and the agricultural or residential use of the surrounding area. Potential effects of the elk ranch on adjacent property values are difficult to evaluate because some nearby owners or residents may like the idea of an alternative livestock facility, whereas others would find it undesirable.

NO ACTION:

Under the No Action alternative, historic uses for the area (timber harvesting, residential occupation, and agriculture) will likely continue.

COMMENTS:

No stipulations or mitigation measures are required or recommended.

8. RISK/HEALTH HAZARDS Would Proposed Action result in:	Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Risk of dispersal of hazardous substances (including, but not limited to chemicals, pathogens, or radiation) in the event of an accident or other forms of disruption?			X		Yes	8(a)
b. Creation of any hazard or potential hazard to domestic livestock?			X		Yes	8(b)
c. Increased risk of contact and disease between elk ranch animals and wild game?			X		Yes	8(c)
d. Creation of any hazard or potential hazard to human health?			X		Yes	8(d)

AFFECTED ENVIRONMENT:

See Section 5 (*Fish/Wildlife*) and Section 7 (*Land Use*) for information that describes the affected environment with respect to this section (*Risk/Health Hazards*).

PROPOSED ACTION:

8(a) There is potential for transmission of water-borne disease pathogens, if present, to be transported from the wildlife upstream into the alternative livestock facility or downstream from the facility via runoff into Bales Creek to Truman Creek and beyond. The DoL currently conducts disease monitoring and testing for brucellosis and tuberculosis. Brucellosis has not occurred on any alternative livestock ranch in Montana. At this time, Montana is classified as a Brucellosis Class Free State; this disease does not exist in alternative livestock or traditional livestock in Montana. Bovine Tuberculosis has occurred on six alternative livestock ranches in Montana. Transmission from those ranches to other ranches and wildlife was prevented by acceptable test protocols, depopulation and on-going surveillance.

From 1991 through 1995, 73 alternative livestock ranches were tested for tuberculosis. Wildlife populations were sampled in areas adjacent to those ranches and three cases (one mule deer and two coyotes) of tuberculosis were discovered in wild animals. At this time, Montana is classified as a Tuberculosis Accredited Free State; this disease does not exist in alternative livestock or traditional livestock in Montana. Chronic wasting disease (CWD) has been detected in alternative livestock and free-ranging deer and elk in several states or provinces. CWD has been affecting wild deer and elk in Colorado and Wyoming for at least 17 years. Through the surveillance placed on all alternative livestock operations by the Department of Livestock in April 1999, one case of CWD was detected in a Montana alternative livestock facility. The CWD affected herd was depopulated. All Montana alternative livestock 16 months of age or older that die, are subject to mandatory testing for CWD. Since CWD surveillance of Montana alternative livestock began in April 1999, more than 460 animals from at least 36 alternative livestock ranches have tested negative. One animal died from the disease and three others had brain lesions associated with the disease, all four animals were located at the depopulated herd. Risk of disease transmission can be mitigated through the existing CWD surveillance of Montana alternative livestock. The DoL's CWD regulations provide requirements for mandatory surveillance; establishing monitored herd status; management of herds identified as trace herds; management of herds with an animal diagnosed with CWD; and enhancement of trace back and observation capabilities.

Requirements for captive cervidae owned by or in the possession of zoos, individuals or other public facilities not licensed as an alternative livestock operation are also addressed. In addition, all alternative livestock that are imported must be from a herd that has completed a minimum of five years of surveillance for CWD, with no cases of CWD in the exporting herd or herds the exporting herd received

elk from. The mandatory five years of CWD surveillance prior to importation into Montana minimizes the risk of introduction of additional cases into Montana. Definitive information regarding the causative agent, persistence, incubation period, mode of transmission, and effective measures to eliminate the disease or prevent future contaminations of CWD is lacking. Preliminary studies by Dr. Beth Williams suggest that transmission requires close contact and repeated exposures. Transmission is more likely to occur late in the course of the disease. The route of CWD transmission at this time is unknown; therefore, the potential for transmission by soil, water or other media into receptor animals cannot be determined.

8(b) There is a potential for elk to carry or become infected with contagious diseases or parasites that are transmissible to other animals. Examples of disease include Bovine Tuberculosis, and Brucellosis. Domestic livestock are currently pastured on adjacent pastureland, and there could be an opportunity for contact between domestic livestock, domestic elk, and wildlife. Transmission of disease would be dependent upon the occurrence of diseased wild animals or diseased animals on the alternative livestock ranch and the frequency of contact between these animals and the domestic livestock. Current regulations are intended to identify and isolate captive elk herds that may include infected animals. Regulations preclude the sale of animals from these captive herds. Regulations also limit contact between domestic elk and other domestic livestock. There is no evidence to support the belief there are disease pathogens present in the wildlife in this area. There is currently no evidence of CWD transmission to domestic livestock or humans.

The risk of disease being passed from domestic elk and deer to domestic livestock would further be mitigated if fence integrity is maintained and the stipulations, requirements, and/or mitigation measures described in this EA are followed. Potential for disease transmission to domestic livestock from alternative livestock is additionally mitigated through DoL disease testing requirements. All animals to be placed on this facility are required to be tested for tuberculosis and brucellosis at the time of import, purchase and/or transportation to the ranch. Montana is presently a tuberculosis-free and brucellosis-free state (i.e., these diseases have not been diagnosed in domestic livestock). Each alternative livestock facility is required to have access to an isolation pen (quarantine facility) on the facility or approved quarantine plan to isolate any animals that are imported or become ill. The state veterinarian can require additional testing and place herds under strict quarantine should problems arise. In addition to the standard requirements for alternative livestock ranches and the additional stipulations and suggested mitigation measures proposed in this EA, it should be noted that there are significant economic incentives for the applicant to follow best management practices. The inadvertent acquisition of diseased animals would risk a substantial investment in breeding stock and the facilities required to maintain those animals.

8(c) Fence integrity must be maintained to minimize the potential for ingress and egress. Trees, steep slopes, and snow drift-prone areas along the perimeter fence have the potential to significantly affect fence integrity. Standard fencing requirements, including the construction of fence that is at least 10 feet high on portions of the exterior fence that bisect slopes of 20 to 40% steepness, as the applicant has agreed to do, and the required stipulations in Section 5 should be sufficient to preclude ingress and egress.

8(d) There is some risk of infection to hunters who field dress deer or elk infected with tuberculosis or brucellosis. Routine brucellosis and tuberculosis testing requirements for alternative livestock offer a measure of surveillance that minimizes that risk. Failure to comply with these requirements is grounds for license revocation. Hunters routinely kill wild mule deer and elk in areas of Wyoming and Colorado where CWD is known to occur. To date, there have been no confirmed cases of CWD transmission to humans.

As mentioned above in the *Land Use* section, the nearest residence is located within approximately ¼ -mile of the proposed facility within the Bales Creek Drainage. Other residences are sparsely located and at greater distances from the site. A county road is adjacent to the site.

NO ACTION:

Risk/health hazards would not occur from the No Action Alternative, other than those that may be associated with the existing land use.

CUMULATIVE EFFECTS:

No cumulative impacts with respect to human health and risk are expected as a result of the Proposed Action.

REQUIRED STIPULATIONS:

See Section 5 *(Fish/Wildlife).*

RECOMMENDED MITIGATION MEASURES:

The mitigation measures recommended in Section 5 (*Fish/Wildlife*) are applicable to this section. In addition, risk of disease epidemic or heavy parasite infections among domestic elk or deer can be minimized by maintaining a reasonable domestic elk and deer stocking rate in relation to the enclosure size, periodic removal of manure from concentration areas, and development of a disease immunization and parasite treatment protocol as applicable to domestic elk and deer.

REFERENCES:

Nielson, K. and J.R. Duncan, 1990. Animal Brucellosis. CRC Press, Ann Arbor, Michigan.

Meyer, R.M., 1997. Tuberculosis Program Training. U.S. Department of Agriculture, Veterinary Services, Englewood, Colorado.

9. COMMUNITY IMPACT Would Proposed Action result in:	Impact				Can Impact be Mitigated	Comment Index
	Uknown	None	Minor	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Changes in historic or traditional recreational use of an area?		X			NA	9(e)
f. Changes in existing public benefits provided by affected wildlife populations and wildlife habitats (educational, cultural or historic)?		X				
g. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

AFFECTED ENVIRONMENT:

The proposed alternative livestock facility is located in Flathead County, approximately 5 miles southeast of Kila, Montana. Local residents in the vicinity of the facility appreciate their space and outdoor recreational activities provided by the natural environment and its resources, such as hunting, fishing, hiking, clean water, photographing, and wildlife and landscape viewing. Public land in the area is used by the public (primarily nearby residents) for various recreational purposes.

PROPOSED ACTION:

9(e) Some local residents may feel licensing the alternative livestock operation would decrease their quality of life. Some neighbors may also be concerned about the increase in human activity that would occur from the operation due to the public coming into the area to view the elk. Recreational use of the area surrounding the elk ranch may decline as people become reluctant to use this area due to various concerns. Neighbors harboring negative feelings about the operation would perceive a loss in their sense of social well-being.

NO ACTION:

Although there would be no licensed alternative livestock facility with the No Action Alternative, denial of the license application may be welcomed by those who may be opposed to it, if any. Ill feelings, however, may be harbored by people who may favor the facility.

CUMULATIVE EFFECTS:

No cumulative impacts are anticipated on communities from operation of the proposed alternative livestock facility.

COMMENTS:

No stipulations or mitigation measures are required or recommended.

10. PUBLIC SERVICES & TAXES Would Proposed Action result in:	Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. A need for new or altered government services (specifically an increased regulatory role for FWP and Dept. of Livestock)?			X		NA	10(a)
b. A change in the local or state tax base and revenues?			X		NA	10(b)
c. A need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				

AFFECTED ENVIRONMENT:

The applicant currently pays property taxes for the land proposed for the elk ranch site, and would pay taxes on the animals after they are placed on the site. The prevailing land uses in the vicinity of the proposed facility is agricultural and residential which has a relatively low average appraisal value.

PROPOSED ACTION:

10(a) Approval of the alternative livestock facility would increase time and expenses spent by FWP and DoL personnel inspecting and monitoring the operation . Since neither FWP or DoL has the option of hiring additional employees to handle the increased workload that could potentially be created by the facility, activities of the current staff may need to be re-prioritized to meet the increased demand created by operation.

10(b) Placing elk in the proposed facility may increase the annual tax contribution from the property, with collected taxes going toward the state, county, and local school district.

NO ACTION:

Under the No Action Alternative, FWP and DoL would not have to inspect and monitor this alternative livestock facility. The current status of tax payments for this property would remain for the No Action Alternative.

CUMULATIVE EFFECTS:

No cumulative impacts are expected on public services and taxes from the proposed alternative livestock project.

COMMENTS:

No stipulations or mitigation measures are required or recommended.

11. AESTHETICS/RECREATION Would Proposed Action result in:	Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X		No	11(a)
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings?		X				

AFFECTED ENVIRONMENT:

The elk ranch site is located less than 1 mile from public land (Figure 3). These public areas offer access to outdoor activities such as hiking, camping, hunting, photographing, and wildlife viewing. General access to these areas is from private land and county roads.

PROPOSED ACTION:

11(a) The visual character of the area may change slightly as a result of the facility fence which would be constructed around the perimeter. This impact would probably be most directed at persons residing and/or recreating in the immediate area, or driving on the Coon Hollow Road (sparse population and recreation in the area). The impact is expected to be minor and most likely short-term since fences are a common sight in the area and the general vicinity has a scattered tree cover with topographic ridges that block the view of the fence from most surrounding areas. Some people may find the elk in the facility appealing.

NO ACTION:

No adverse impacts to aesthetics or recreation are expected under the No Action Alternative.

CUMULATIVE EFFECTS:

No cumulative impacts are expected.

COMMENTS:

No stipulations or mitigation measures are required or recommended.

12. CULTURAL & HISTORICAL RESOURCES Would Proposed Action result in:	Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?	X				Yes	12(a)
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				

AFFECTED ENVIRONMENT:

A file search was conducted by the State Historic Preservation Office (SHPO) for the proposed project area. Results of this search show there are is currently one historic bridge in the area that dates to the early 1900's. In addition, there have been two previous cultural resource inventories in the specified location in 1993 and 1994 (SHPO 2000). SHPO feels that due to the presence of sites in nearby areas, and that the majority of the previous inventory effort was confined to road ways, that there is a potential for unknown or unrecorded cultural properties in the area which may be impacted by this project. Therefore, SHPO recommends that a reconnaissance survey be conducted in order to determine whether or not such sites exist and if they will be impacted.

PROPOSED ACTION:

12(a) According to SHPO (2000), there is a possibility that unknown or unrecorded cultural properties may be present at the proposed facility. SHPO recommends a reconnaissance survey be conducted prior to project initiation to determine if sites exist and if they would be impacted by the Proposed Action.

NO ACTION:

No impacts to cultural resources are expected from the No Action Alternative unless other disturbances occur within the property.

CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities near the proposed alternative livestock facility are anticipated.

REQUIRED STIPULATIONS:

None.

RECOMMENDED MITIGATION MEASURES:

If archeological artifacts are observed during construction of the facility fence or from other activities, work should stop in the area and the discovery reported to:

Montana Historical Society; Historic Preservation Office
1410 8th Avenue; P.O. Box 201202; Helena, Montana 59620
phone (406) 444-7715

If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs and preserve the artifact(s).

REFERENCES:

Montana State Historic Preservation Office (SHPO), 2000. Letter from Philip Melton (SHPO, Helena, MT) to Daphne Digrindakis (Maxim Technologies, Inc.), dated March 6, 2000.

C. SUMMARY

13. SUMMARY Would Proposed Action, considered as a whole:	Impact				Can Impact be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total)		X				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?			X		Yes	13(b)
c. Potentially conflict with the substantive requirements or any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts would be proposed?	X					13(d)
e. Generate substantial debate or controversy about the nature of the impacts that would be created?			X		Yes	13(ed)

PROPOSED ACTION:

13(b) Refer to discussion in Section 8 (Risk/Health Hazards).

13(d) Precedent for the permitting of alternative livestock ranches with the knowledge that there are some uncertainties about the potential risk of disease transmission between captive and wild animals already is established. The alternative livestock industry is established in Montana and the legislature recognizes that the production of alternative livestock provides a viable economic opportunity for any private property owner as well as the traditional livestock producers who are interested in diversifying their ranch productivity (MCA 87-4-431). The statutes and regulations that govern the industry presume that it is appropriate to permit new operations, with reasonable restrictions to protect Montana's interests in its resident wildlife.

13(e) Montana FWP and DoL acknowledge that the permitting of alternative livestock ranches generates public controversy. Some issues are particularly controversial when alternative livestock facilities block migration routes or consume significant areas of land historically utilized by wild game. Because the proposed Saving Grace Elk Ranch area would not significantly block big game migration routes or consume a significant portion of land utilized by wild game, the controversial nature of the Proposed Action is minor.

Montana FWP and DoL also acknowledge that there are uncertainties regarding diseases of wildlife and alternative livestock, the identification of infected animals and the transmissibility of disease. The agencies agree that an outbreak of livestock disease in one or more wildlife populations would be a significant, negative effect. However, with careful attention to current regulations and implementation of the mitigation measures specified in this environmental assessment would make the transmission of disease from animals on the Stetson Saving Grace Alternative Livestock Ranch to wildlife a very unlikely event.

NO ACTION:

Potential risks or adverse effects which are uncertain would not occur from the "No Action" alternative, other than those associated with the existing land use.

COMMENTS:

None

CUMULATIVE EFFECTS:

None

REQUIRED STIPULATIONS (Requirements):

See Section 5 (Fish/Wildlife).

RECOMMENDED MITIGATION MEASURES:

See Section 5 (Fish/Wildlife).

SUMMARY EVALUATION OF SIGNIFICANCE CRITERIA

a. Does the Proposed Action have impacts that are individually minor, but cumulatively considerable? (A project may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)

No.

b. Does the Proposed Action involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?

Yes. A potential risk or adverse effect which is uncertain, but extremely hazardous if they were to occur would be the spread of a disease or parasite from domestic elk or deer to wild elk or deer. The risk and appropriate measures to mitigate the risk are discussed in Section 5 (*Fish/Wildlife*) and Section 8 (*Risk/Health Hazards*) of this EA.

c. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

The No Action Alternative would avoid many of the potential impacts listed above. This site would likely be managed for continued livestock grazing. The No Action Alternative would probably not result in exclusion of wildlife from this site.

d. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

This section provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (Environmental Quality Council, 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in Appendix A. Mitigation measures described in this section address both minor and significant impacts. Requirements are designed to ensure that the fence enclosure is maintained in game-proof condition. These requirements have been agreed to by the applicant. Most potential minor impacts from the Proposed Action are addressed as mitigation measures that are recommended, but not required.

REQUIREMENTS #1 and #2

(1) Licensee shall inspect the perimeter fence on a regular basis and immediately after or during events that have a greater probability of damaging the fence (e.g., high streamflow/flooding periods; spring ice break-up) to insure fence integrity with respect to stream debris, erosional stream flows, ice jams, burrowing animals, predators, and other game animals. If it appears that fence integrity may be compromised because of high streamflow, flooding, and/or ice conditions in the Bales Creek drainage, the licensee shall immediately remove all elk from the stream bottomland pasture(s). If repairs are required of the perimeter fence at one or both of the stream crossing sites, no elk shall be placed back into these pastures until the fence is inspected for game-proof condition by a FWP representative. Should ingress or egress become a problem during winter due to areas of snow accumulation, areas prone to snow drifting shall be identified and the fence height raised sufficiently to prevent ingress/egress. Additional remedial actions may be required by FWP if the measures discussed above do not adequately prevent ingress/egress, including possible installation of an interior fence to separate Bales Creek from the remainder of the elk ranch.

(2) The licensee shall submit a written fence monitoring plan to FWP for approval prior to issuance of the license. The fence monitoring plan shall include information on how elk would be removed from the bottom areas within 24 hours if necessary; how the stream crossing sites would be monitored during the period that high flows typically can occur (March - July); and how the fence would be maintained in a game-proof condition at the stream crossing sites.

Restriction on Private Property Use

These requirements do not restrict the use of private property by requiring the following: regular monitoring of fence integrity; more frequent monitoring of perimeter fence during periods of high streamflow, flooding, and or ice build-up; raising the fence where snow drifts may cause ingress/egress; moving elk out of stream bottom pasture if high stream flow conditions may affect fence integrity; and submit a written fence monitoring plan to FWP for approval.

Alternatives

Do not perform the monitoring and safety measures described above regarding fence integrity.

This alternative would not adequately address the potential problems that may compromise fence integrity resulting in ingress/egress at the facility.

Benefits from Imposing the Stipulation

These requirements are imposed to minimize potential ingress/egress at the proposed alternative livestock facility. In addition to existing FWP fencing and wildlife protection requirements, these requirements would effectively reduce the risk of contact with wildlife and domestic livestock.

Types of Expenditures the Requirement Would Mandate

Performing the measures described above as needed to maintain fence integrity would not cause a substantial increase in fence construction and facility operation costs.

Requirement's Effect on Property Values

None expected.

PART III. NARRATIVE EVALUATION AND COMMENT

Wildlife use of the area and potential for through-the-fence contact with elk ranch animals (consider year-around use, traditional seasonal habitat use, and location of travel routes and migration corridors).

This proposed alternative livestock ranch is similar in size and scope to most other alternative livestock ranches in northwest Montana. The proposed elk ranch is located in moderate density white-tailed deer habitat. Occasional wild elk and moose would be expected to pass through this area as well. The Bales Creek drainage is a natural travel corridor for wildlife. Wild elk would be expected to be attracted to the facility by domestic elk, and wild deer would certainly walk the perimeter trying to get around the facility. Also, like other alternative livestock ranches, there is a public and agency concern regarding the potential for disease transmission to wild populations.

Risk of disease transmission can be reduced by maintaining the integrity of the enclosure fence, by maintaining a healthy domestic big game population, and by following stipulations and mitigations presented in this EA. If the elk ranch is managed properly, the risk of disease transmission from domestic elk to wild ungulates would likely be minimal. The frequency of fence line contact between domestic elk and wildlife and the risk that this contact might result in disease transmission is mitigated by disease testing requirements. In order for disease transmission to occur, the organism causing the disease needs to be present. Any alternative livestock introduced to this proposed facility will be tested disease free prior to movement to the facility. There is no credible reason to conclude that the proposed alternative livestock ranch represents any greater risk than other licensed operations that exist in Montana.

Potential for escape of elk ranch animals or ingress of wildlife (consider site-specific factors that could reduce the effectiveness of perimeter fences built to standards outlined in Rule 12.6.1533, including steepness of terrain, winter snow depths/drifting, susceptibility of fences to flood damage, etc.).

Fence integrity: Fence construction would be completed in accordance with requirements of FWP under ARM 12.6.1531. The proposed alternative livestock operation is located in on either side of Bales Creek, a tributary of Truman Creek. The area is comprised of both relatively level bottomlands and uplands and moderate to steep slopes where the fence descends into the drainage on the south side of the creek. The fence would perpendicularly cross four moderate (10-20 degrees) to steep (20+ degrees) slopes. The steepest slope measured on the site visit was approximately 30 degrees. Erosion on the steepest slopes may become a problem when large numbers of elk travel along the fence line. This may create poor contact of the fence with the ground when rainfall events may cause rapid soil erosion.

The two Bales Creek fence crossing sites, as well as the remaining perimeter fence, need to be approved as game-proof by FWP prior to issuance of the license. Peak flow rates during the spring could result in high flow and/or flooding conditions that may affect the integrity of the fence. Debris (e.g., wood and ice) also may build-up on the upstream side of the fence crossing, creating a dam and increased water pressure on the fence.

The enclosure site is located at an elevation of about 3,800 feet. The expected snow levels during winter will vary greatly in relation to the amount of snowfall, wind velocity, and wind direction associated with winter storms passing through this area. This area has the potential to receive considerable snowfall in single storm events and cumulatively during the winter; however, during normal winters an estimated 12-24 inches of snow is expected. Snow drifting would not likely occur under normal situations as the area is relatively sheltered due to its forested nature. Windthrow of trees along the fenceline could however pose a risk to the integrity of the fence.

Overall, the site potential for fencing this pasture ranges from excellent on the northern portion to moderate to poor on the steeper slopes descending into the Bales Creek bottom lands and creek crossings.

Proportion (%) of the total habitat area currently used by wildlife that would be enclosed or otherwise impacted.

The proposed expansion enclosure would cumulatively exclude approximately 40 acres of moderate to good quality white-tailed deer, elk, and moose year-round habitat. Mule deer would also use the site during seasons other than normal winter. The reach of Bales Creek and adjacent ridges from which the game animals would be excluded represents less than 1 percent of overall riparian and associated upland winter range habitat in this area.

References:

Bissel, Gael, 2000. FWP wildlife biologist, personal communication with Pat Mullen, April 2000.

PART IV. EA CONCLUSION

1. **Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO**

   No. The appropriate level of analysis for the Proposed Action is a mitigated EA because:

   - all impacts of the Proposed Action have been accurately identified in the EA; and
   - all identified significant impacts would be mitigated to minor or none.

2. **Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the Proposed Action, is the level of public involvement appropriate under the circumstances?**

   Upon completion of the Draft EA, a notice is sent to adjoining landowners, local newspapers, and other potentially affected interests, explaining the project and asking for input during a 21-day comment period which extends from May 7, 2000 until 5 pm May 28, 2000. The Draft EA is also available to the public from the FWP addresses and phone numbers listed below and in the *Summary* section of this EA (p. 2), and through the State Bulletin Board System during the public comment period.

3. **Duration of comment period if any:** 21 days

4. **Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:**

Fish, Wildlife & Parks

Brian Sommers, FWP Game Warden
Gael Bissel, FWP Wildlife Biologist
Fish, Wildlife & Parks, Region 1
490 N. Meridian Road
Kalispell, Montana 59901
Phone (406) 752-5501

Maxim Technologies, Inc.

Daphne Digrindakis, Project Manager
Doug Rogness, Water Resources
Mike Cormier, Soil Resources
Pat Mullen, Wildlife, Vegetation, EA Prep.
303 Irene
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Phone (406) 443-5210

Department of Livestock

Evaleen Starkel, Alternative Livestock Program Specialist
Dr. Tom Linfield, Asst. State Veterinarian
Dr. Ken Lee, Veterinarian at Large
Animal Health Division
Third Floor, Scott Hart Building
301 Roberts
Helena, MT 59620

APPENDIX A

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

The 54th Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on the following checklist refer to the following requirements:

(1) Licensee shall inspect the perimeter fence on a regular basis and immediately after or during events that have a greater probability of damaging the fence (e.g., high streamflow/flooding periods; spring ice break-up) to insure fence integrity with respect to stream debris, erosional stream flows, ice jams, burrowing animals, predators, and other game animals. If it appears that fence integrity may be compromised because of high streamflow, flooding, and/or ice conditions in the Bales Creek drainage, the licensee shall immediately remove all elk from the stream bottomland pasture(s). If repairs are required of the perimeter fence at one or both of the stream crossing sites, no elk shall be placed back into these pastures until the fence is inspected for game-proof condition by a FWP representative. Should ingress or egress become a problem during winter due to areas of snow accumulation, areas prone to snow drifting shall be identified and the fence height raised sufficiently to prevent ingress/egress. Additional remedial actions may be required by FWP if the measures discussed above do not adequately prevent ingress/egress, including possible installation of an interior fence to separate Bales Creek from the remainder of the elk ranch.

(2) The licensee shall submit a written fence monitoring plan to FWP for approval prior to issuance of the license. The fence monitoring plan shall include information on how elk would be removed from the bottom areas within 24 hours if necessary; how the stream crossing sites would be monitored during the period that high flows typically can occur (March - July); and how the fence would be maintained in a game-proof condition at the stream crossing sites.

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is **NO**, skip questions 5a and 5b and continue with question 6.]
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is **NO**, do not answer questions 7a-7c.]
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.